

Docket No.: 27592-00837-US  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Arto Palin et al.

Application No.: 10/773,287

Confirmation No.: 8738

Filed: February 9, 2004

Art Unit: 2618

For: Synchronization of Time-Frequency Codes

Examiner: Wen Wu Huang

**RESPONSE UNDER 37 C.F.R. 1.116 (FINAL OFFICE ACTION)**

Box AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Madam:

This is in response to the final Office Action mailed March 23, 2009, in the above-captioned patent application.

**REMARKS/REQUEST FOR RECONSIDERATION**

Applicants thank the Examiner for the consideration given this application. Claims 26-28, 29-36 and 38-55 are pending in this application. Claims 26, 34 and 42 are independent claims. Reconsideration and allowance of the present application are respectfully requested.

**Claim Rejections Under 35 U.S.C. §103**

Claims 26, 27, 31-35, 39-43, 45 and 50-55 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2002/01679931 to Jang et al. (hereinafter “Jang et al.”) in view of U.S. Patent No. 6,256,334 to Adachi (hereinafter “Adachi”). Claims 28, 36 and 44 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Jang and Adachi as applied to claims 26, 34 and 42 and in further view of U.S. Patent Publication No. 2003/0206561 to Schmidl (hereinafter “Schmidl”). Claims 30, 38 and 46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Jang and Adachi as applied to claims 26, 34 and 42 and in further view of U.S. Patent No. 6,333,937 to Ryan (hereinafter “Ryan”). Claims 47 and 48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Jang and Adachi as applied to claim 42 and in further view of U.S. Patent No. 7,110,472 to Sakoda (hereinafter “Sakoda”). Claim 49 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Jang and Adachi as applied to claim 42 and in further view of U.S. Patent Publication No. 2003/0078006 to Mahany (hereinafter “Mahany”). These rejections are respectfully traversed for at least the following reasons.

Applicants respectfully submit that independent Claims 26, 34, and 42, from which all other claims depend, all contain elements that are not disclosed or suggested by the combination of Jang et al. with Adachi. For example, Claim 26 includes the recitation, “transmitting data on a transmit frequency band of said selected frequency hopping pattern if said energy level indicates a particular condition of said monitored frequency band, wherein a timing of further data transmission according to the selected frequency hopping pattern is determined based on a time at which the particular condition is met.” Similarly, Claim 34 includes the recitation, “means for transmitting data on a transmit frequency band of said selected frequency hopping pattern if said energy level indicates a particular condition of said monitored frequency band, wherein a timing

of further data transmission according to the selected frequency hopping pattern is determined based on a time at which the particular condition is met.” Finally, Claim 42 includes the recitation, “wherein a timing of further data transmission according to the selected frequency hopping pattern is determined based on a time at which the particular condition is satisfied.”

At page 3, the Office Action admits, “Jang [et al.] is silent to teaching that wherein a timing of further data transmission according to the selected frequency hopping pattern is determined based on a time at which the particular condition is met,” in connection with the rejection of Claim 26. Similar statements are found in the Office Action at pages 5 and 7, regarding the other independent claims. In each case, however, the Office Action alleges that Adachi, at col. 17, lines 48-60, teaches the claim elements not taught by Jang et al. Applicants respectfully disagree.

In order to understand the cited portion of Adachi, it is necessary to start at col. 17, line 20. Following from lines 20-60, Adachi explains that when a base station is activated, it sends out a probe to determine if there are nearby base stations (see lines 25-33). If the probe is received by a neighboring base station, a probe response signal will be received from the neighboring base station (see lines 34-40). If a probe response signal is received, “the search section 50a obtains, from the received probe response, the pattern and time (the timer value) of frequency hopping performed in another radio LAN 10 (another radio base station 1)” (lines 49-53). Then, “[t]he FH selection/setting section 50b selects, as the frequency hopping pattern of the radio base station itself, a frequency hopping pattern which is completely the same as that of the thus-obtained frequency hopping..., and sets the timer 50c to a value different from the timer value (time) obtained from the probe response signal” (lines 53-58). In other words, the timing of frequency hopping is based on the time value of a received signal, providing the timing information of a neighboring LAN. ***This is completely different from the claim elements noted above***, in which “a timing of further data transmission according to the selected frequency hopping pattern is determined based on a time at which the particular condition is met.” There is simply no “condition” met in Adachi from whose time (i.e., the time at which the condition is met) a timing of further data transmission is determined; timing in Adachi is determined based on a received timing indication.

Applicants further note that they have not found any teachings in the other cited references that would remedy these shortcomings of Jang et al. and Adachi.

For at least these reasons, it is respectfully submitted that Claims 26, 34, and 42, as well as all other claims (which depend from these claims) are allowable over the cited references.

**Disclaimer**

Applicants may not have presented all possible arguments or have refuted the characterizations of either the claims or the prior art as found in the Office Action. However, the lack of such arguments or refutations is not intended to act as a waiver of such arguments or as concurrence with such characterizations.

**CONCLUSION**

In view of the above, reconsideration and allowance are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 27592-00837-US, from which the undersigned is authorized to draw.

Dated: May 19, 2009

Respectfully submitted,

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